

What is claimed is:

1. An authentication method based on private bytes of USB flash memory media, comprising:

5 step 10, reading authentication information from the private bytes of the USB flash memory media by an authentication unit;

step 20, authenticating, by the authentication unit, the authentication information input by a user by using the authentication information read from the private bytes of the USB flash memory media;

10 step 30, determining whether the authentication is successful or not, if it is successful, opening an operation authorization based on the authentication information, otherwise, executing a process for failed authentication.

2. The authentication method based on private bytes of USB flash memory media according to Claim 1, wherein before the step 10, further comprising:

15 step 1, detecting whether the USB flash memory disk is connected to the authentication unit, if it is, executing the step 10;

20 step 2, inquiring the user whether to re-authenticate or not, if the user determines to re-authenticate, then prompting the user to connect a USB flash memory media to an USB interface, and executing the step 1 after confirming the connection, otherwise, determining that the authentication is failed, and executing the process for failed authentication.

25 3. The authentication method based on private bytes of USB flash memory media according to Claim 2, wherein the process for failed authentication in the step 30 is to execute the step 2.

4. The authentication method based on private bytes of USB flash memory media according to Claim 1, wherein before the step 10, further comprising:

step 1', detecting, by the authentication unit, whether the USB flash memory disk is connected to the authentication unit or not;

step 2', if the connection is held, executing the step 1' after a predetermined time period, and if the connection is not held, then locking the operating system;

5 step 3', prompting the user to connect the USB flash memory media to the USB interface and inputting the authentication information;

step 4', detecting, by the authentication unit, whether the USB flash memory media is connected to the authentication unit;

10 step 5', if the connection is held, then executing the step 10; otherwise, executing the step 3'.

15 5. The authentication method based on private bytes of USB flash memory media according to Claim 4, wherein the process for failed authentication in the step 30 is to release the lock of the operating system and execute the step 1' if it is successful, otherwise, execute the step 4'.

20 6. The authentication method based on private bytes of USB flash memory media according to Claim 1, further comprising the step of setting the authentication information to the private bytes of the USB flash memory media when the authentication unit is installed, the setting step comprising:

step A, sending the authentication information input by the user to the private bytes of the USB flash memory media by the authentication unit;

25 step B, determining whether the operation of writing the authentication information into the private bytes of the USB flash memory media is successful, if it is successful, opening an operation authorization based on the authentication information, otherwise, executing a subsequent process for failed authentication if the operation of writing the authentication information is not successful.

7. The authentication method based on private bytes of USB flash memory media according to Claim 6, wherein the operating system log-on information of the user is contained in the authentication information.

5 8. The authentication method based on private bytes of USB flash memory media according to Claim 6 or 7, wherein before the step A, further comprising:

step X, detecting, by the authentication unit, whether the USB flash memory disk is connected with the authentication unit, if the connection is held, executing the step A;

10 step Y, inquiring the user whether to re-authenticate or not , if the user determines to re-authenticate, then prompting the user to connect the USB flash memory disk to the USB interface, and executing the step X after confirming the connection; otherwise, determining that the authentication is failed, and ending the setting process.

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9. The authentication method based on private bytes of USB flash memory media according to Claim 8, wherein the subsequent process for failed authentication in the step B is to execute the step Y.

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10. The authentication method based on private bytes of USB flash memory media according to Claim 1, wherein a control chip of the USB flash memory media receives a read/write instruction sent from the authentication unit, determines whether a read/write operation is executed to the private bytes, if it is, the read/write operation to the private bytes is executed, if it is not, the read/write operation to normal bytes is executed.

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